

THIS REPORT CONTAINS ASSESSMENTS OF COMMODITY AND TRADE ISSUES MADE BY USDA STAFF AND NOT NECESSARILY STATEMENTS OF OFFICIAL U.S. GOVERNMENT POLICY

Required Report - public distribution

Date: 10/29/2015

**GAIN Report Number:** KS1538

Korea - Republic of

**Grain and Feed Update** 

October 2015

**Approved By:** 

Ross Kreamer

**Prepared By:** 

Sunchul Choi/Mark Myers

# **Report Highlights:**

Post revises rice production upward, despite a decline in planted area, based on record average yields of 5.33 MT/ha, due to favorable weather in September. Rice production is now estimated at 4.26 MMT in MY 2015/16. As a result, ending stocks are expected to increase by 300,000 MT to 1.5 MMT. MY 2015/16 wheat consumption and imports remain unchanged at 3.85 MMT and 4.0 MMT, respectively, while MY 2015/16 corn consumption is raised slightly to 10.1 MMT due to sustained high levels of animal inventories, and imports are increased to 10 MMT.

Post:	<b>Commodities:</b>
Seoul	Wheat
	Corn

# **Author Defined:**

WHEAT

## **Production:**

Wheat production remains unchanged from the previous report.

	Korea: Wheat Production							
Crop Year	Harvested Area(Hectare)	Yield(MT/HA)	Production(MT)					
2006	1,738	3.34	5,810					
2007	1,928	3.81	7,624					
2008	2,549	4.06	10,359					
2009	5,067	5.15	26,087					
2010	12,548	3.12	39,116					
2011	13,044	3.35	43,677					
2012	9,467	3.91	37,014					
2013	7,373	3.68	27,130					
2014	7,180	3.26	23,409					
2015 <sup>a/</sup>	10,076	3.55	35,800					

Rice, Milled

Source: Ministry for Agriculture, Food, and Rural Affairs (MAFRA), Statistics Korea (KOSTAT)

# **Consumption:**

The MY 2015/16 wheat consumption forecast remains unchanged at 3.85 million tons from the earlier forecast. The feed wheat consumption forecast remains unchanged at 1.5 million tons from the earlier forecast.

Korea: Post Estimates of Domestic Wheat Use						
	(1,000 MT, J	uly/June)				
Year	2012/13	2013/14	2014/15 <sup>c/</sup>	2015/16 <sup>c/</sup>		
Imported Milling Wheat 1/	2,193	2,132	2,165	2,150		
Imported Milling Wheat 2/	167	180	180	180		
Flour Imports <sup>a/</sup>	39	30	44	35		
Flour Exports <sup>a/</sup>	62	58	61	65		
Pasta Imports <sup>a/</sup>	135	150	143	155		
Pasta Exports <sup>a/</sup>	130	140	135	140		
Local Wheat	37	27	23	36		
FSI Consumption b/	2,379	2,321	2,359	2,351		
Feed Wheat	2,818	1,936	1,479			
Total Consumption b/	5,197	4,257	3,838	3,851		

Source: Korea Feed Association (KFA), Korea Flour Millers Industry Association (KOFMIA) and Korea Customs Service (KCS)

a/ FAS/Seoul forecast; yield is based on five year average.

a/ Wheat basis

b/ include local wheat, flour imports and pasta imports but exclude flour exports and pasta exports

c/ FAS/Seoul forecast

	Korea	: Monthly Wheat U (1,000 MT)	Jse	
Month	Feed Wh	neat	Milling V	Wheat a/
	MY 2014/15	MY 2015/16	MY 2014/15	MY 2015/16
July	129	124	183	181
August	121	119	175	170
Subtotal	250	243	358	351
September	126	na	166	na
October	134	na	179	na
November	130	na	172	na
December	143	na	186	na
January	115	na	194	na
February	103	na	152	na
March	116	na	183	na
April	117	na	176	na
May	119	na	172	na
June	125	na	177	na
Total	1,479	na	2,115	na

Source: KFA and KOFMIA

a/ includes wheat flour exports, but excludes the portion used in soy-sauce production

#### Trade:

MY 2015/16 wheat import forecast remains unchanged from the initial projection of 4 million tons, of which, 2.5 million tons are for milling (including flour and pasta imports on a wheat equivalent basis) and 1.5 million tons for feed. Milling wheat for flour processing is expected to stay around 2.3 million tons. The import forecast hinges to a large extent on the continued availability of feed wheat, while milling wheat demand remains stagnant.

As of early October 2015, Korean feed millers have completed contracts for delivery of feed grade wheat for the first ten months of MY 2015/2016 (Jul/Jun) at around 1.3 million tons, as feed grade wheat has been less competitive than corn for feed.

	Korea: MY 2015/16 Feed Wheat Contracts by				
	Estimated Time of Arriv				
	(Unit: 1,000 MT, as of Sept				
ETA	Quantity	Price (USD/MT) <sup>1/</sup>			
Jul. 2015	0	0			
Aug.	233	213.96			
Sep.	159	205.77			
Oct.	232	203.47			
Nov.	116	202.60			
Dec.	55	205.30			
Jan. 2016	123	201.77			
Feb.	85	200.73			
Mar.	120	198.47			
Apr.	160	195.92			
Total	1,286				

Source: Local Grain Traders 1/ CNF on Weighted Average

Korea: Wheat Imports (1,000 MT, Customs Cleared Basis)						
Marketing Year (July/June)	Feed Wheat	Milling Wheat	Flour Imports	Pasta Import	Total	
05/06	1,536	2,220	41	101	3,898	
06/07	976	2,298	69	108	3,451	
07/08	565	2,317	105	117	3,104	
08/09	1,151	2,058	69	105	3,383	
09/10	2,164	2,071	127	119	4,481	
10/11	2,075	2,520	63	123	4,781	
11/12	2,868	2,169	42	122	5,201	
12/13	2,820	2,461	39	135	5,455	
13/14	1,948	2,181	30	150	4,309	
14/15	1,391	2,370	44	143	3,948	
$15/16^{2/}$	1,500	2,300	40	160	4,000	

Source: Korea Customs Service

<sup>2/</sup> FAS/Seoul forecast

Korea: MY 20015/16 Monthly Wheat Imports by Origin						
	(1,00	0 MT, based	on Customs	Clearance)		
Country	U. S.	Australia	Canada	India	Other	Total
Milling Wheat						
2015 July	116	114	13	0	1	244
August	37	96	0	0	0	133
September	96	94	33	0	1	224
Total(Jul-Sep) 2015	248	304	47	0	2	600
Total(Jul-Sep) 2014	302	185	62	0	0	550
Feed Wheat		_				
2015 July	0	0	0	0	162	162
August	0	0	0	0	58	58
September	0	0	0	0	211	211
Total(Jul-Sep) 2015	0	0	0	0	431 <sup>a/</sup>	431
Total(Jul-Sep) 2014	47	0	99	10	115	271
Total Wheat						
2015 July	116	114	13	0	163	406
August	37	96	0	0	58	191
September	96	94	33	0	212	435
Total(Jul-Sep) 2015	248	304	46	0	432	1,033
Total(Jul-Sep) 2014	349	185	160	10	115	821

Source: Korea Customs Service

# **Production, Supply and Demand Data Statistics:**

#### Wheat PS&D

Wilcut I DCD							
Wheat	2013/2014		2014/2015		2015/2016		
Market Begin Year	Jul 2	Jul 2013		Jul 2014		July 2016	
Korea, Republic of	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Area Harvested	7	7	7	7	10	10	
Beginning Stocks	1521	1521	1437	1402	1411	1339	

<sup>1/</sup> Wheat basis

a/ Ukraine (166,104 MT); France (159,979 MT); Bulgaria (63,922 MT); Denmark (42,039 MT)

Production	27	27	23	23	36	36
MY Imports	4288	4309	3942	3948	4200	4000
TY Imports	4288	4309	3942	3948	4200	4000
TY Imp. from U.S.	1409	1220	1160	1234	0	1300
Total Supply	5836	5857	5402	5373	5647	5375
MY Exports	144	198	153	196	150	200
TY Exports	144	198	153	196	150	200
Feed and Residual	1936	1936	1479	1479	1500	1500
FSI Consumption	2319	2321	2359	2359	2351	2351
Total Consumption	4255	4257	3838	3838	3851	3851
Ending Stocks	1437	1402	1411	1339	1646	1324
Total Distribution	5836	5857	5402	5373	5647	5375
(1000 HA) ,(1000 MT)						

#### **CORN**

#### **Production:**

Post's corn production estimate remains unchanged from the previous report based on the preceding five-year average yield. The Korean government is expected to release official production figures for 2015 in May 2016.

Korea: Corn Production					
Crop Year	Area (HA)	Yield (MT/HA)	Production (MT)		
2006	13,661	4.73	64,623		
2007	16,981	4.82	83,513		
2008	18,366	5.05	92,830		
2009	15,326	5.02	76,975		
2010	15,528	4.79	74,339		
2011	15,823	4.65	73,612		
2012	17,001	4.89	83,210		
2013	15,905	5.06	80,465		
2014	15,839	5.18	82,008		
2015 <sup>a/</sup>	15,800	4.91	77,640		

Source: Ministry for Agriculture, Food, and Rural Affairs (MAFRA), Statistics Korea (KOSTAT)

## **Consumption:**

The MY 2015/16 corn consumption forecast has been revised to 10.1 million tons, up 0.1 million tons from post's previous forecast due to greater demand for feed grade corn in view of maintaining higher levels of animal inventories, meanwhile corn consumption for food and processing purposes remains stagnant at 2.1 million tons.

MY 2014/15 corn consumption estimate is revised up to 10.2 million tons from the previous forecast due to greater demand of food processing purpose, which is composed of 8 million tons for feed purposes and 2.2 million tons for food, seed and industrial (FSI) purposes.

On the basis of the first eleven months, MY 2014/15 compound feed production is expected to stay around 19 million tons due to strong growth in the poultry sector offsetting the reduction in beef and dairy cattle, while swine numbers stayed strong and steady despite slow growth of animal inventory affected by the earlier outbreaks of FMD and PED. For the first eleven months, poultry compound feed production increased by 8.5 percent and swine by 0.3 percent, respectively, over the same period in the previous marketing year, while compound feed production for cattle declined by 6.5 percent.

a/ FAS/Seoul projection based on five-year average yield

The corn inclusion rate in total compound feed production is expected to be at 42 percent in MY 2014/15, up one percent from the previous year, with feed wheat use declining.

Major corn processors have continued using conventional corn imported from Serbia, Brazil, Ukraine, Russia, Hungary, Romania, Australia and Bulgaria, and non-GM corn imported from the United States for food. Many Korean food processing companies are reluctant to use ingredients sourced from biotech corn.

Korea: Total Corn Utilization (Oct./Sept., 1,000 MT)						
Marketing	Feed	Processing	Food	Total		
Year		a/	b/			
2008/09	6,368	1,418	108	7,894		
2009/10	6,362	1,928	92	8,382		
2010/11	6,074	2,051	89	8,214		
2011/12	5,690	2,036	89	7,815		
2012/13	6,483	1,900	98	8,481		
2013/14	7,762	2,034	95	9,891		
2014/15 <sup>c/</sup>	8,000	2,100	93	10,193		
2015/16 <sup>d/</sup>	8,000	2,000	95	10,095		

Source: Korea Feed Association (KFA), Korea Corn Processing Industry Association (KOCPIA)

d/ FAS Seoul forecast

Korea: Monthly Corn Use (1,000 MT)						
Month	Feed Corr	1	Processing	Corn		
	MY 2013/14	MY 2014/15	MY 2013/14	MY 2014/15		
October	588	676	175	180		
November	596	621	165	178		
December	687	707	164	169		
January	703	635	161	170		
February	632	602	148	155		
March	653	668	180	187		
April	664	658	171	178		
May	669	679	177	182		
June	646	703	176	181		
July	659	701	184	183		
August	626	655	175	181		
S. Total	7,092	7,303	1,876	1,945		
September	639	na	159	na		
Total	7,762	na	2,034	na		

Source: Korea Feed Association (KFA), Korea Corn Processing Industry Association (KOCPIA)

Korea: Feed Ingredient Use for Compound Feed Production (October/September, 1,000 MT)								
Items	MY 2012/13	MY 2013/14	MY 2014/15 <sup>a</sup>	MY 2015/16 <sup>b/</sup>				
Sub. Total Grains and Grain Substitutes	12,115	12,080	12,200	12,200				
- Wheat	2,710	1,633	1,470	1,500				
- Corn	6,483	7,762	8,000	8,000				
- Other Grains and Grain Substitute c/	2,992	2,685	2,730	2,700				
Others <sup>d/</sup>	6,698	6,758	6,800	6,800				

a/ Used for wet and dry milling process based on imported corn.

b/ For on-farm human consumption (on-the-cob) or snack food consumed on-the-cob, as puffed kernels or as corn tea. Imported white corn for popping has been included since MY 2004.

c/ based on the imports for the first eleven months.

Grand Total	18,883	18,838	19,000	19,000
-------------	--------	--------	--------	--------

Source: Korea Feed Association (KFA)

a/ FAS Seoul estimate based on the feed ingredient use for the first eleven months

b/ FAS Seoul forecast

c/includes Tapioca, bran and gluten feed.

d/ includes vegetable protein meal, animal protein, minerals/additives, tallow, DDGS and molasses.

Korea: Compound Feed Production by Species (October/September, 1,000 MT)								
Species	MY 2012/13	MY 2013/14 <sup>a/</sup>	MY 2014/15 <sup>b</sup>	MY 2015/16 <sup>c/</sup>				
Poultry	4,726	5,107	5,500	5,400				
Swine	6,100	6,015	6,100	6,300				
Cattle	6,572	6,388	6,000	5,900				
Others <sup>d/</sup>	1,483	1,314	1,400	1,400				
Total	18,881	18,824	19,000	19,000				

Source: Ministry for Agriculture, Food, and Rural Affairs (MAFRA)

a/ Preliminary

b/ FAS/Seoul estimate based on feed production for the first eleven months

c/ FAS/Seoul forecast

d/ include ducks, rabbit, horse, sheep, deer, quail etc

	Korea: Compound Feed Production Comparison by Species								
	for								
	the First Eleven Mo	onths							
	(October/May, 1,000	) MT)							
Species	MY 2013/14	MY 2014/15	Change						
Poultry	4,695	5,096	+8.5						
Swine	5,518	5,534	+0.3						
Cattle	5,869	5,488	-6.5						
Others	1,205	1,268	+5.2						
Total	17,245	17,386	+0.8						

Source: Ministry for Agriculture, Food, and Rural Affairs (MAFRA)

#### Trade:

MY 2015/16 total corn imports are forecast at 10 million tons, up 0.2 million tons from post's earlier forecast due to continued high animal inventories. Processing corn imports is expected to remain stagnant at 2 million tons. As of early October 2015, Korean buyers have almost completed delivery of corn contracts for the first five months of the current marketing year 2015/16, approaching about four million tons, and continue to make new contracts for delivery in March 2015 onward.

Most of the contracted purchases to date were from worldwide sources including South America, Eastern Europe and the United States at seller's option. In view of global corn prices, grain traders predict for the time that most of the contracts will be shipped from the United States, South America, Eastern Europe or Black Sea.

In MY 2014/15, total corn imports were completed at 10.2 million tons, up 0.2 million tons from the Post's earlier estimate of 10 million tons to meet a greater demand for both feed corn and corn processing, but down 0.2 million tons from the record corn imports in the previous year. U.S. corn dominated the Korean market, supplying about 40 percent of total imports, followed by Brazil (20 percent), Ukraine (17 percent) and Russia (6 percent); however, it is a decline in market share from the previous marketing year.

Korea: Corn Imports (1,000MT, Customs Cleared Basis)								
Marketing Year	From World From the U. S.			U. S. Share				
	Feed	Processing	Total	Feed	Processing	Total	%	
07/08	7,680	1,629	9,309	7,259	1,077	8,336	90	
08/09	5,781	1,431	7,212	4,883	921	5,804	80	

09/10	6,457	2,003	8,460	6,097	1,407	7,504	89
10/11	6,060	2,047	8,107	5,183	1,133	6,316	78
11/12	5,600	2,035	7,635	3,450	307	3,757	49
12/13	6,230	1,944	8,174	341	115	456	6
13/14	8,319	2,086	10,405	3,769	842	4,611	44
14/15	8,055	2,112	10,167	3,495	527	4,022	40
15/16 <sup>a/</sup>	8,000	2,000	10,000	3,500	500	4,000	40

Source: Korea Customs Service a/ FAS/Seoul forecast

		Monthly Corn Impor Γ, Customs Cleared Ba		
Month	Feed Cor	n	Processin	g Corn
	MY 2013/14	MY 2014/15	MY 2013/14	MY 2014/15
October	620	846	131	181
November	631	465	178	183
December	975	750	222	137
January	885	743	118	168
February	829	558	170	138
March	488	636	158	258
April	664	759	234	145
May	698	689	166	162
June	540	636	300	208
July	591	693	85	166
August	658	671	112	177
September	740	609	212	188
Total	8,319	8,055	2,086	2,112

Source: Korea Customs Service

	Korea: MY 2015/	16 Corn Con	tracts 1/ by Est	imated Time of Ar	rival (ETA)	
		(Unit: 1,0	00 MT, as of S	Sep. 2015)		
ETA	U.S.	Europe 4/	SOAM	Others <sup>2/</sup>	Total	Price <sup>3/</sup>
Oct. 2015	55	0	0	888	943	195
Nov.	0	108	0	678	786	195
Dec.	0	100	0	610	710	189
Jan. 2016	0	60	0	548	608	190
Feb.	0	60	0	586	646	187
Mar.	0	0	0	264	264	187
Jun.	0	0	0	50	50	199
Total	55	328	0	3,624	4,007	

# **Production, Supply and Demand Data Statistics:**

# Corn PS&D

Corn	2013/2014		2014/2015		2015/2016	
Market Begin Year	Oct 2013		Oct 2014		Oct 2	2016
Korea, Republic of	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post

Source: Local Grain Traders

1/ reflecting 90-95 percent of actual contracts due to the omission of some data on contracts

2/ optional origins at seller's option out of USA, SOAM (South America) or Europe

3/ USD/MT, CNF on Weighted Average

<sup>4/</sup> include Eastern Europe and Black Sea

Area Harvested	16	16	16	16	16	16
Beginning Stocks	1265	1265	1860	1859	1842	1909
Production	80	80	82	82	77	77
MY Imports	10406	10405	10000	10168	10000	10000
TY Imports	10406	10405	10000	10168	10000	10000
TY Imp. from U.S.	5312	4611	0	4022	0	4000
Total Supply	11751	11750	11942	12109	11919	11986
MY Exports	0	0	0	0	0	0
TY Exports	0	0	0	0	0	0
Feed and Residual	7762	7762	8000	8000	8000	8000
FSI Consumption	2129	2129	2100	2200	2100	2100
Total Consumption	9891	9891	10100	10200	10100	10100
Ending Stocks	1860	1859	1842	1909	1819	1886
Total Distribution	11751	11750	11942	12109	11919	11986
(1000 HA) ,(1000 MT)	•					

# **Corn Import Trade Matrix**

Import Trade Matrix			
Country	Korea, Republic of		
Commodity	Corn		
Time Period	Oct/Sept	Units:	1,000MT
Imports for:	2013		2014
U.S.	4611	U.S.	4022
Others		Others	
Brazil	1980	Brazil	2079
Ukraine	1760	Ukraine	1750
Russia	804	Russia	623
Serbia	406	Serbia	492
Argentina	358	Argentina	435
South Africa		Hungary	312
Romania	110	Romania	198
Australia	59	South Africa	147
Hungary	50	Australia	47
France	49	)	
Total for Others	5743	3	6083
Others not Listed	51	l I	63
Grand Total	10405	5	10168

Source: Korea Customs Service (KCS)

<b>Korea: Animal Inventory</b> (1,000 Head, 1,000 Birds, as of September 2015)								
Animal	Year	March	June	September	December			
Beef Cattle	2011	2,881	3,053	3,044	2,950			
	2012	2,940	3,109	3,143	3,059			
	2013	2,966	3,064	3,043	2,918			

	2014	2,811	2,879	2,820	2,759
	2015	2,659	2,748	2,753	2,680d/
Dairy Cattle	2011	396	403	404	404
	2012	404	410	417	420
	2013	420	419	422	424
	2014	428	424	429	431
	2015	425	418	418	410-412c/
Swine	2011	7,036	7,330	7,783	8,171
	2012	8,852	9,432	9,937	9,916
	2013	10,107	10,181	10,188	9,912
	2014	9,698	9,680	9,966	10,090
	2015	9,971	10,018	10,332	10,100-10,300c/
Layer a/	2010	62,524	61,586	60,095	61,700
	2011	61,025	60,723	61,212	62,425
	2012	63,200	61,953	61,326	61,344
	2013	62,340	60,610	62,674	64,824
	2014	64,572	62,851	65,263	67,674
	2015	68,878	67,907	72,090	na
Broiler b/	2010	72,692	101,690	71,271	77,871
	2011	69,932	110,122	71,038	76,435
	2012	69,387	97,750	68,540	76,130
	2013	71,938	95,898	64,505	76,487
	2014	77,879	103,593	75,846	77,746
	2015	82,749	110,489	81,184	na

Source: Korea Statistics (KOSTAT) and Korea Rural Economic Institute (KREI)

## **RICE**

#### **PRODUCTION**

Statistics Korea (KOSTAT) released 2015 rice production estimate at 4.26 million metric tons (MMT) based on a nationwide survey of 6,500 rice fields conducted from September 15 to 21, 2015.

The survey results show total harvested acreage at 799,344 HA, which is a 2.0 percent decline from the previous year. However, despite declining acreage, favorable weather in September during the critical filling stage resulted in the highest recorded yield, reaching a similar level compared with last year. KOSTAT is expected to release its final production estimate shortly after the rice harvest is completed in mid-November.

Therefore, Post's forecast for rice production in MY 2015/16 is revised up to 4.26 million metric tons (MMT), up 6.5 percent from the initial forecast of Korea's rice production.

#### Area

Rice area has continued to decrease annually – ranging from 5,000 HA to 38,000 HA every year since 2001. Area decrease in 2015 was similar level compared to last year in response to a greater demand from housing and building complexes and conversion of rice paddy land to upland for production of more profitable cash crops.

Korea: 2015 Rice Production Forecast							
	2014 Rice Production	2015 Rice Production Forecast					
Area (1,000 HA)	816	799					
Yield (Kg/10a)	520	533					
Production (1,000MT)	4,241	4,260					

a/ Excluding breeders.

b/ Excluding multi-use broilers

c/ KREI forecast

d/ FAS Seoul forecast

Korea: Rice Area and Production Estimate per Province (September 15 Crop Survey Basis)								
		Area (Hectare	e)	Pro	oduction (Metric	ton)		
Crop Year	2014	2015	Change (%)	2014	2015	Change (%)		
National Total	815,506	799,344	-2.0	4,240,739	4,258,013	0.4		
Kyonggi	86,472	82,071	-5.1	426,425	412,882	-3.2		
Kangwon	33,126	32,300	-2.5	173,588	170,330	-3.5		
Chungbuk	40,653	39,786	-2.1	215,456	213,253	-1.0		
Chungnam	148,684	146,319	-1.6	835,669	827,715	-1.0		
Chonbuk	124,089	121,765	-1.9	679,393	680,028	0.1		
Chonnam	169,585	170,185	0.4	809,201	857,224	5.9		
Kyounbuk	106,832	104,712	-2.0	570,082	570,459	0.1		
Kyongnam	76,158	73,934	-2.9	376,568	382,951	1.7		
Cheju	214	128	-40.2	625	424	-32.2		
Cities <sup>1/</sup>	29,693	28,144	-5.2	153,732	142,747	-7.1		

Source: Statistics Korea (KOSTAT)

Yield Favorable weather developments increased rice yields to 533Kg per 10 Are, up 2.5 percent from the previous year, which is the record level of bump crop in 2009.

	Korea: Rice Area, Yield and Production						
Crop Year	Area (1,00HA)	Yield (KG/10A)	Production (Milled, 1,000 MT)				
2002 a/	1,053	471	4,927				
2003 b/	1,016	441	4,451				
2004	1,001	504	5,000				
2005	980	490	4,768				
2006	955	489	4,680				
2007	950	464	4,408				
2008	936	518	4,843				
2009	925	532	4,916				
2010	892	482	4,295				
2011	854	495	4,224				
2012	849	472	4,006				
2013	833	508	4,230				
2014	816	520	4,241				
2015c/	799	533	4,260				

Source: Ministry of Agriculture, Food and Rural Affairs (MAFRA)

## Government Rice Purchase Program under the Public Food Grain Stockholding Program (PFSP)

The government also purchases rice for price stabilization purposes. Under the Public Food Grain Stockholding Program for Food Security, the Korean government will purchase domestic paddy rice during the harvest season (October-December) at the average market price and sell it during non-harvest periods at the prevailing domestic market price.

Between October and December 2015, the Korean government plans to purchase 360,000 MT (milled basis) of paddy rice representing around 9 percent of the estimated 2015 rice crop production. Additionally, the government plans to

<sup>1/</sup> paddy land located in seven big cities such as Seoul, Pusan etc.

a/ Heavy rains during the summer and the effects of typhoon Rusa (Aug 31 – Sep 1)

b/Cool and rainy days during the growing season and the effects of typhoon Maemi (Sep 9 - 12)

c/ Statistics Korea (KOSTAT) estimate

purchase 30,000 tons for the APTERR (ASEAN Plus Three Emergency Rice Reserve), which was established to provide member countries with rice in the event of natural disasters. The total amount of rice agreed upon in July 2013 by the 13 member countries and stored in reserve was 787,000 metric tons including 150,000 metric tons promised by Korea.

	Korea: Government Rice F	urchases	
	under		
	Public Food Grain Stockholding I	Program (PFSP)	
Crop Year	Production(1,000 MT)	Purchase(1,000 MT)	%
2005	4,768	719	15.1
2006	4,680	504	10.8
2007	4,408	417	9.5
2008	4,843	400	8.3
2009	4,916	370	7.5
2010	4,295	340	7.9
2011	4,224	261	6.2
2012	4,006	363	9.1
2013	4,230	367	8.7
2014	4,241	610 <sup>a/</sup>	14.4
2015plan	4,260	360	8.5

Source: Ministry of Agriculture, Food and Rural Affairs (MAFRA)

a/ includes 240,000 MT to stabilize rice market in addition to 370,000 MT under PFSP.

#### Government and NACF's Loan Programs

The Korean government is expected to provide loans for rice millers worth more than 1.2 trillion Korean Won (US\$1 billion) with a special loan rate between 0 and 2 percent per annum this year. The National Agricultural Cooperative Federation (NACF), the national farmers group, also continues to provide about 1.3 trillion Korean Won (US\$1.1 billion) worth of loans to rice farmers/millers with zero interest rate. The main goal of the loan programs is to encourage rice millers to purchase more rice from farmers minimizing the downward pressure of harvest on prices in the rice market. Another bumper crop has caused concerns with rice farmers over the collapsing farm gate price compounded by anxiety over rice market liberalization that has taken effect early this year.

Most rice purchases under the loan programs provided by the Korean government and the NACF will be introduced into the rice retail market through NACF's Rice Processing Complexes (RPCs) and independent RPCs throughout the 2015/16 (Nov/Oct) rice marketing year. Korean rice farmers expect the purchasing measures will help prop up prices during the rice harvest season.

Rice farmers are expected to sell approximately 2 million metric tons during the harvest season including 390,000 MT of government direct purchasing under the Public Food Grain Stockholding Program and APTERR, and 1.6 million metric tons of rice under loan programs.

	Korea: NACF Rice Purchases <sup>a/</sup>							
Crop Year	Production(1,000 MT)	Purchase(1,000 MT)	%					
2005	4,768	1,071	22					
2006	4,680	1,306	28					
2007	4,408	1,227	28					
2008	4,843	1,617	33					
2009	4,916	1,950	40					
2010	4,295	1,380	32					
2011	4,224	1,327	31					
2012	4,006	1,331	33					
2013	4,230	1,465	35					
2014	4,241	1,650	39					
2015	4,260	na	na					

Source: Ministry of Agriculture, Food and Rural Affairs (MAFRA)

#### **CONSUMPTION**

The Korean government's preliminary rice consumption is at 4.42 million MT (MMT) for MY 2013/14 as table rice consumption continues declining. In MY 2014/15, total domestic rice consumption is estimated at 4.45 MMT. MY 2015/16 rice consumption is forecast to continue declining due to downtrend of per capita consumption (table rice basis).

Korea: Rice Utilization Pattern (1,000 MT, milled)							
Rice Year (Nov Oct.)	MY 2012/13 <sup>a/</sup>	MY 2013/14 <sup>b/</sup>	MY 2014/15 <sup>c/</sup>	MY 2015/16 <sup>d</sup>			
Table Rice	3,435	3,340	3,280	3,220			
Processing	526	535	550	600			
(for food)	(470)	(457)	(460)	(460)			
(for liquor)	(56)	(78)	(90)	(140)			
Seed	36	35	35	35			
Other and Loss	494	512	583	500			
Total Demand	4,491	4,422	4,448	4,355			
Per Capita Table Rice Consumption (Kg)	67.2	65.1	63.9	62.7			

Source: Ministry of Agriculture, Food and Rural Affairs (MAFRA)

a/ Revised b/ Preliminary c/ FAS/Seoul estimate d/ FAS/Seoul forecast

Korea: Processing Rice Consumption Pattern (1,000 MT, milled)							
Purpose	MY 2010/11	MY 2011/12	MY 2012/13 <sup>a/</sup>	MY 2013/14 b/			
KRFA	234	248	246	227			
KALIA	244	148	56	78			
Others c/	166	170	224	238			
Total	644	566	526	535			

Source: Ministry of Agriculture, Food and Rural Affairs (MAFRA)

Note: Korea Rice Foodstuffs Association (KRFA), Korea Alcohol & Liquor Industry Association (KALIA)

#### **TRADE**

In 2015, during the period of special treatment agreed upon under the Minimum Market Access agreement (MMA) ending in December 31, 2014, Korea continues to import the mandatory volume of 408,700 metric tons from Most Favored Nation (MFN) countries at the duty level of 5 percent under the tariff rate quota (TRQ) regime. Accordingly, the aT (Korea Agro-Fisheries and Food Trade Corporation), the government's state trading arm, manages the purchase of all imported rice through a tendering process and subsequent auctions off imported table rice.

#### **2015 TRQ Tendering Process:**

The Korean government has been making purchases for the 2015 TRQ of 408,700 MT since January 2015. As of August 4, 2015, the aT has purchased 315,524 metric tons of rice (milled basis), about 77 percent of the entire 2015 TRQ import commitment; consisting of 305,027 metric tons of brown rice for processing purposes, equivalent to 274,524 metric tons (milled), 30,000 metric tons of milled rice for table purpose, and 11,000 metric tons of milled broken rice for processing purpose, respectively. The Korean government is expected to continue purchases of the remaining 93,176 metric tons (milled) within calendar year 2015.

The United States has sold 112,352 metric tons of rice (milled basis) worth USD 105 million, about 27 percent of the 2015 entire TRQ; consisting of 102,352 metric tons of medium grain brown rice (or 92,117 metric tons in milled basis) for processing purposes and 20,000 metric tons of milled rice for table purposes, respectively.

a/ MAFRA Revised

b/ MAFRA Preliminary

c/ traditional foods or beverage made of local rice.

Korea: Rice Contracts by Country under 2015 MFN TRQ <sup>1/</sup> (Unit: MT, Milled Basis, as of August 4, 2015)							
	MFN TRQ						
Country	Processing Use	Table Use	Total				
USA	92,117	20,000	112,117(27.4)				
China	140,330	10,000	150,330(36.8)				
Thailand	6,077	0	6,077(1.5)				
Australia	9,000	0	9,000(2.2)				
Vietnam	38,000	0	38,000(9.3)				
S. Total	285,524	30,000	315,524(77.2)				
Open Quota	93,176		93,176(22.8)				
G. Total	408,700		408,700(100)				

Source: Korea Agro-Fisheries and Food Trade Corporation (aT) 1/ under ongoing process of buying tenders since January 2015

	Korea: U.S. Rice Sales to Korea under 2015 TRQ <sup>1/</sup>								
	(ongoing process of buying tenders as of August 4, 2015)								
Contracts	Milled rice(MT)	Brown rice(MT)	Unit Price(USD/MT)	Amount (USD)	ETA				
	for Table	for Processing	2/						
1	0	5,000	786.00	3,930,000	20150531				
2	0	22,000	856.00	18,832,000	20150531				
3	0	5,000	826.98	4,134,900	20150815				
4	0	15,000	873.34	13,100,100	20150831				
5	0	7,000	825.47	5,778,290	20150915				
6	0	5,000	821.95	4,109,750	20150930				
7	0	5,000	834.67	4,173,350	20150831				
8	0	5,000	836.07	4,180,350	20151015				
9	0	5,000	835.40	4,177,000	20151031				
10	0	9,000	831.17	7,480,530	20151130				
11	0	5,000	840.67	4,203,350	20151130				
12	0	5,352	843.80	4,516,018	20151130				
13	0	9,000	833.96	7,505,640	20151215				
14	5,000	0	961.00	4,805,000	20151130				
15	5,000	0	961.00	4,805,000	20151215				
16	10,000	0	961.00	9,610,000	20160229				
Total	20,000	102,352a/		105,341,278	_				

Source: Korea Agro-Fisheries and Food Trade Corporation (aT) a/ equivalent to 92,117 MT, milled basis 1/ under ongoing process of buying tenders since January 2015 2/ CIP for processing purposes and CIF for table purposes

Korea: 2015 MMA Rice Tender Results (as of August 4, 2015)										
Bid Date (mm-dd-yy)	Rice Type	Volume (Contract Basis)	Volume (Milled Rice Basis)	- 0	Price (US\$/MT)		delivery Due	Agent	Supplier	
1/28/2015	MG #3 Brown	5,000	4,500	USA	786.00	CIP	20150531	Seo-Mok	ADM	
1/28/2015	LG #3 Brown	15,000	13,500	Vietnam	442.00	CIP	20150430	Daewoo	Vinafood1	
1/28/2015	LG #3 Brown	15,000	13,500	Vietnam	449.60	CIP	20150630	Daewoo	Vinafood1	
2/26/2015	SG #3 Brown	22,000	19,800	China	870.00	CIP	20150531	Daewoo	COFCO	
2/26/2015	MG #3 Brown	22,000	19,800	USA	856.00	CIP	20150531	Seo-Mok	ADM	
3/24/2015	SG #3 Brown	12,000	10,800	China	879.85	CIP	20150630	Singsong	Jilin Grain	
3/24/2015	SG #3 Brown	10,000	9,000	China	879.95	CIP	20150630	Singsong	Jilin Grain	
3/24/2015	SG #3 Brown	11,897	10,707	China	890.00	CIP	20150930	Daewoo	COFCO	
4/21/2015	SG #3 Brown	20.000	18.000	China	893.50	CIP	20150815	Daewoo	COFCO	

4/21/2015	SG #3 Brown	10,000	9,000	China	890.00	CIP	20150831	Singsong	Jilin Grain
4/21/2015	SG #3 Brown	10,000	9,000	China	890.00	CIP	20150915	Singsong	Jilin Grain
4/21/2015	SG #3 Brown	10,000	9,000	Australia	872.90	CIP	20150915	D&B	Sun Rice
4/21/2015	SG #3 Brown	5,000	4,500	USA	826.98	CIP	20150815	Singsong	ACC
4/21/2015	MG #3 Brown	5,000	4,500	USA	834.67	CIP	20150831	Seo-Mok	ADM
4/21/2015	MG #3 Brown	15,000	13,500	USA	873.34	CIP	20150831	Seo-Mok	ADM
4/21/2015	MG #3 Brown	7,000	6,300	USA	825.47	CIP	20150915	Singsong	ACC
4/21/2015	MG #3 Brown	5,000	4,500	USA	821.95	CIP	20150930	Singsong	ACC
5/21/2015	SG #3 Brown	10,000	9,000	China	860.00	CIP	20151015	Singsong	Jilin Grain
5/21/2015	SG #3 Brown	17,026	15,323	China	890.00	CIP	20151031	Daewoo	COFCO
5/21/2015	MG #3 Brown	5,000	4,500	USA	836.07	CIP	20151015	Singsong	ACC
5/21/2015	MG #3 Brown	5,000	4,500	USA	835.40	CIP	20151031	Singsong	ACC
5/21/2015	MG #3 Brown	9,000	8,100	USA	831.17	CIP	20151130	Singsong	ACC
7/3/2015	SG #3 Brown	15,000	13,500	China	893.00	CIP	20151130	Daewoo	COFCO
7/3/2015	MG #3 Brown	18,000	16,200	China	849.00	CIP	20151031	Daewoo	COFCO
7/3/2015	MG #3 Brown	5,000	4,500	USA	840.67	CIP	20151130	Seo-Mok	ADM
7/3/2015	MG #3 Brown	5,352	4,817	USA	843.80	CIP	20151130	D&B	Sun Rice
7/3/2015	MG #3 Brown	9,000	8,100	USA	833.96	CIP	20151215	Daewoo	FRC
7/3/2015	LG #3 Brown	6,752	6,077	Thailand	438.34	CIP	20151031	Hyolim	Chiameng
7/31/2015	SG #1 Milled	10,000	10,000	China	998.78	CIF	20160131	Daewoo	COFCO
7/31/2015	MG #1 Milled	5,000	5,000	USA	961.00	CIF	20151130	Seo-Mok	ADM
7/31/2015	MG #1 Milled	5,000	5,000	USA	961.00	CIF	20151215	Seo-Mok	ADM
7/31/2015	MG #1 Milled	10,000	10,000	USA	961.00	CIF	20160229	Seo-Mok	ADM
7/31/2015	#4 Brewer's Milled	11,000	11,000	Vietnam	384.40	CIP	20151130	Daewoo	Vinafood1
	Total	346,027	315,524						

Source: Korea Agro-Fisheries and Food Trade Corporation (aT)

#### **Selling Auctions of Imported Rice:**

aT sells table rice shipments to consumers through a public auction system, while the Ministry of Agriculture, Food and Rural Affairs (MAFRA) distributes processing rice to end-users such as food processors and alcoholic beverage producers at a set price throughout the year.

As a result of increased consumer confidence in U.S. medium grain milled rice, auctions of USDA No. 3 milled rice finished in June 2015 ahead of rice from other origins. Ongoing auction prices of U.S. medium grain milled rice (USDA No. 1) are higher than Chinese short grain milled rice, reflecting higher consumer confidence in U.S. rice than other origins. The progress of auctioning for Chinese rice has been comparably slow, while Thai and Australian milled rice remains in warehouses.

Korea: Status of Rice Auction for Table Rice under 2014 CSQ (Unit: metric tons, milled basis, as of October 7, 2015)									
Commodity	USDA Grade	Total Table Rice CSQ	Auctioned Off	Balance	Auctioned Off (%)				
U.S. Medium Grain	#1	40,056	17,058	30,939	43				
U.S. Medium Gram	ium Grain #3	4,451	4,450	0	100 (as of June 3, 2015)				
Chinese Short Grain	#1	47,965	13,994	33,971	29				
Chinese Short Grain	#3	21,433	0	21,433	0				
Assetselies Medison Cosin	#1	2,697	0	2,697	0				
Australian Medium Grain	#3	2,698	0	2,698	0				
Thai Long Grain	#1	3,220	411	2,809	13				
Thai Jasmine Rice	#1	90	90	0	100 ( as of Aug. 26, 2015)				
Total		122,610	36,003	94,547	29				

Source: Korea Agro-Fisheries and Food Trade Corporation (aT)

Korea: Status of Rice Auction for Table Rice under 2013 CSQ									
(Unit: metric tons, milled basis, as of July 29, 2015)									
Commodity	USDA Grade	Total Table Rice CSQ		Balance	Auctioned Off (%)				

U.S. Medium Grain	#1	61,188	61,188	0	100 (as pf Dec. 24 2014)
O.S. Medium Gram	#3	6,229	6,229	0	100 (as of Oct. 13, 2014)
Chinese Short Grain	#1	24,507	24,504	3	100(as of Feb 27, 2015)
Clinese Short Grain	#3	21,435	21,435	0	100(as of Feb 11, 2015)
Thai Long Grain	#1	3,056	3,055	1	100 (as of July 29, 2015)
Thai Jasmine Rice	#1	90	90	0	100(as of Oct. 31, 2014)
Total		116,505	116,501	4	100

Source: Korea Agro-Fisheries and Food Trade Corporation (aT)

K			Prices of Important on per Kg on		e Rice			
Auctioning-off Period		ium Grain	Chinese Sh (Medium	ort Grain	Thai Long Grain		Australian Medium Grain	
Auctioning-off Teriod	#1	#3	#1	#3	#1	#1	#3	
April-September 2006 (2005 MMA)	1,138	991	1,274				none	
March-August 2007 (2006 MMA)	1,363	1,211	1,357	1,303	953	none	none	
February-August 2008 (2007 MMA)	1,542	1,510	1,487	1,558	1,132	none	none	
February2009 -May 2010 (2008 MMA)	1,160	994	1,125 (1,100)		1,329	none	none	
February 2010-March 2011 (2009 MMA)	970	881	914 (850)		672	none	none	
April 2011-January 2012 (2010 MMA)	913	1,074 <sup>a/</sup>	707	612	518	none	none	
December 2011- October 8, 2013 (2011MMA)	1,258	1,452	1,297	1,501	(802°) 944	none	none	
August 2012-September 24, 2014 (2012 MMA)	1,677	1,634	1,378	1,374	903	1,299	1,128	
July 2013- July 29, 2015 (2013 MMA)	1,594	1,573	1,284	1,318	844	none	none	
December 2014- October 7, 2015 (2014 MMA)	1,397 <sup>b/</sup>	1,472	1,247 <sup>b/</sup>	na	901 <sup>b/</sup>	na	na	

Source: Korea Agro-Fisheries and Food Trade Corporation (aT) a/ Auctioned-off during October-December 2011

c/#3

## Exports:

Korea's rice exports were 1,296 metric tons for the first eight months in CY 2015, with an expectation for the year of slightly less than 2,000 MT. U.S. imports of Korean rice are expected to be higher than the previous year for the period.

	Korea: Rice Export (Milled)									
Calendar Year To the World To the United States										
	Quantity (MT)	Value (US\$1,000)	Quantity (MT)	Value (US\$1,000)						
2005	18	89	5	5						
2006	9	40	0.2	1						
2007	507	1,322	333	876						
2008	356	829	115	285						
2009	4,183	7,300	443	777						

b/ ongoing

2010	3,765	6,394	272	587
2011	3,782	6,277	161	244
2012	2,223	4,424	90	185
2013	1,517	3,363	86	180
2014	1,684	3,894	123	303
2015(1-8)	1,296	2,913	206	627

Source: Korea Customs Service (KCS)

## **Stocks:**

MY 2015/16 ending stocks (through the end of October 2016) are forecast to increase to 1.5 million tons or 35 percent of total anticipated consumption as rice production in the past three years has been greater than actual demand with the decline of per capita table rice consumption continuing. MY 2014/15 stocks (at the end of October 2015) are estimated at about 1.1 million tons or 26 percent of total domestic consumption.

Korea: Status of Rice Stocks (Milled rice, 1,000 MT, as of end October)								
Rice Year (NovOct.)	Rice Year (NovOct.) 2010/11 2011/12 2012/13a/ 2013/14b/ 2014/15c/ 2015/16c							
Total	1,034	730	755	899	1,140	1,513		
Government Stock	984	730	755	899	1,140	1,513		
-Domestic Rice	696	487	na	na	na	na		
-Imported Rice	288	243	na	na	na	na		
Civil Stock	50	0	0	0	0	0		

Source: FAS/Seoul Estimate based on MAFRA data

## **Production, Supply and Demand Data Statistics:**

Rice PS&D

Rice, Milled	2013/2	014	2014/	2015	2015/	<b>2016</b>
Market Begin Year	Nov 2	013	Nov	2014	Nov	2016
Korea, Republic of	USDA Official	New Post	USDA Official	New Post	USDA Official	NAW Pact
Area Harvested	833	833	816	816	799	799
Beginning Stocks	780	780	899	899	1158	1140
Milled Production	4230	4230	4241	4241	4000	4260
Rough Production	5632	5632	5638	5638	5318	5663
Milling Rate (.9999)	7511	7511	7522	7522	7522	7522
MY Imports	313	313	470	450	410	470
TY Imports	379	379	450	370	410	410
TY Imp. from U.S.	38	38	0	140	0	140
Total Supply	5323	5323	5610	5590	5568	5870
MY Exports	2	2	2	2	2	2
TY Exports	2	2	2	2	2	2
Consumption and Residual	4422	4422	4450	4448	4360	4355
Ending Stocks	899	899	1158	1140	1206	1513
Total Distribution	5323	5323	5610	5590	5568	5870
(1000 HA), (1000 MT)	<u> </u>					

# Appendix

a/ MAFRA Preliminary

b/ FAS/Seoul Preliminary

c/ FAS/Seoul forecast

	Korea: Monthly Wholesale Price of Milled Rice (High Quality)										
Month\Year	CY 20	)13	CY	2014	CY	2015					
	Won/Kg	USD/Kg	Won/Kg	USD/Kg	Won/Kg	USD/Kg					
January	2,200	2.07	2,180	2.05	2,070	1.90					
February	2,200	2.03	2,180	2.03	2,069	1.88					
March	2,204	2.00	2,180	2.04	2,046	1.84					
April	2,210	1.97	2,169	2.08	2,040	1.88					
May	2,213	2.00	2,137	2.09	2,019	1.85					
June	2,220	1.96	2,130	2.09	1,990	1.79					
July	2,220	1.97	2,130	2.09	1,990	1.74					
August	2,220	1.99	2,130	2.08	1,990	1.69					
September	2,220	2.05	2,215	2.06	2,004	1.70					
October	2,222	2.09	2,076	1.96	2,019	1.75					
November	2,183	2.15	2,088	1.91	na	na					
December	2,180	2.06	2,073	1.88	na	na					
Average	2,208	2.02	2,133	2.03	na	na					

Source: Korea Agricultural Marketing Information Service (KAMIS) Note: Monthly Average Exchange Rate is applied.

	Korea: Monthly Retail Price of Milled Rice (High Quality)									
Month\Year	CY 201	13	CY 2	2014	CY	2015				
	Won/Kg	USD/Kg	Won/Kg	USD/Kg	Won/Kg	USD/Kg				
January	2,311	2.17	2,321	2.18	2,277	2.09				
February	2,325	2.14	2,323	2.17	2,263	2.06				
March	2,329	2.12	2 ,307	2.16	2,252	2.03				
April	2,341	2.09	2 ,293	2.20	2,211	2.04				
May	2,331	2.10	2 ,289	2.24	2,239	2.05				
June	2,340	2.06	2 ,275	2.23	2,243	2.02				
July	2,334	2.07	2 ,245	2.20	2,225	1.95				
August	2,341	2.10	2,236	2.18	2,218	1.88				
September	2,340	2.16	2,262	2.19	2,241	1.90				
October	2,343	2.20	2,320	2.19	2,252	1.95				
November	2,346	2.31	2,301	2.10	na	na				
December	2,336	2.21	2,283	2.07	na	na				
Average	2,335	2.13	2,288	2.17	na	na				

Source: Korea Agricultural Marketing Information Service (KAMIS) Note: Monthly Average Exchange Rate is applied.

	Korea: Foreign Exchange Rate		
	(Korean Won against USD)		
Month	CY 2013	CY 2014	CY 2015
January	1,065	1,065	1,087
February	1,086	1,072	1,099
March	1,102	1,070	1,112
April	1,121	1,044	1,086
May	1,109	1,024	1,091
June	1,135	1,019	1,112
July	1,126	1,020	1,143
August	1,116	1,025	1,177
September	1,084	1,034	1,182
October	1,065	1,059	1,157a/

November	1,016	1,095	na
December	1,056		na
Average	1,094	1,052	na

Source: Global Financial Service a/ October 1-19, 2015